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Triangulation in a Study of Listening Strategy Instruction

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1. INTRODUCTION

The results of a study done by Ozeki (2000) showed similarities among Japanese female university students and differences in the use of strategies among high and low scorers on a listening test. Most students did not often utilize listening strategies themselves. If listening strategies are classified according to O'Malley & Chamot's classification (1990), these students rarely used *metacognitive strategies* such as *directed attention*, *selective attention*, or *self-evaluation*. Moreover, they rarely used *social/affective strategies* such as *cooperation* and *questioning for clarification in English*. Their familiar *social/affective strategies* were limited to *questioning for clarification in Japanese and peeking*. *Cognitive strategies* which were available to the students were also restricted. They frequently employed *translation, inferencing, resourcing,* and *note taking*. *Translation* was often involved in other strategies such as *resourcing* and *note taking*. *Inferencing* was usually used only when clear external clues were available.

The range and extent of listening strategies used by the students were limited. In order to develop the students' listening strategies and listening skills, strategy training would be effective for all the students regardless of their level. Consequently, the purpose of this study was to introduce listening strategy training and evaluate the effects of strategy training. In the evaluation of strategy training, different modes of triangulation were used in order to give findings credibility. These modes included the use of different measurements, data types, data sources, and methods.

2. TRIANGULATION IN LEARNING STRATEGY RESEARCH

An ethnographer improves the probability that the finding will be credible by means of prolonged engagement, persistent observation, and triangulation (Lincoln & Guba, 1985). Among these, triangulation is an essential procedure to enhance the credibility of research as

well as the depth and clarity of the constructs of the phenomenon (Glesne & Peshkin, 1992; Miles & Huberman, 1994; Stake, 1995). Denzin (1984) identifies four different modes of triangulation: *data sources, methods, investigators,* and *theories.* The use of different data sources implies that the researchers check if the phenomenon they are observing carries the same meaning under other circumstances; namely, at different times and on different occasions. The second type of triangulation, methodological triangulation, is the one most recognized. It means the use of multiple methods of collecting data such as interviews, observations, and open-ended questionnaires. The rationale for this data collection strategy is that the weaknesses of one method are often the strengths of another method (Merriam, 1988; O'Malley & Chamot, 1990). Therefore, they can increase the accuracy of the interpretation by triangulating with several sources of data (LeCompte & Preissle, 1993). For investigator triangulation, other researchers observe the same phenomenon. It's not feasible to have other researchers cooperate all the way through the research, but it is possible to have them cooperate at the data interpretation stage. The last one is the use of multiple theories for the sake of triangulation. Theory triangulation is often unaccepted by qualitative paradigm researchers because they think that certain facts are only consistent with one theory (Lincoln & Guba, 1985; Miles & Huberman, 1994). However, it might be achieved through the use of two investigators or reviewers who have different theoretical perspectives (Stake, 1995).

When researchers use triangulation in their research in the qualitative paradigm, they rarely use all of Denzin's (1984) four modes of triangulation. Some researchers choose one of them, while other researchers use more than one in a single study. Furthermore, researchers sometimes use other modes of triangulation. For instance, they use different data types and measurements for triangulation. Data types are classified differently depending on different concepts of classification. They are divided into qualitative and quantitative data types, or are situated along the continuum from uncontrolled to more controlled data types (Miles & Huberman, 1994). Measurement triangulation means the use of different criteria to evaluate a phenomenon.

The classifications and definitions of protocols of triangulation are ambiguous, because researchers do not necessarily agree. For example, McGroarty and Zhu (1997) use terms, methodological and data triangulation. Their methodological triangulation means the use of multiple measurements to evaluate the effects of training and the use of quantitative and qualitative methods. Moreover, data triangulation in their study means the use of multiple data sources and data sets. Their definition of methodological triangulation is completely different from that of Denzin, because their data triangulation agrees with Denzin's definition of methodological triangulation.

Although researchers do not agree with the classifications and definitions of modes of triangulation, they use triangulation as a means to increase internal validity of research. In learning strategy research, different modes of triangulation are also used. Data type triangulation, a combination of qualitative and quantitative data, is often used to investigate the relationships between learning strategies and language proficiency (e.g., Bialystok, 1981; Carrell, Pharis, & Liberto, 1989; Politzer & McGroarty, 1985). Verbal report methods are used as qualitative data and a performance test is used as quantitative data. Methodological triangulation is commonly used in order to classify learning strategies and to investigate the use of learning strategies of particular learners. For this purpose, two or three of the following methods are employed: observation, think-aloud procedures, interviews, and questionnaires. For instance, O'Malley, Chamot, Stewner-Manzanares, Küpper, and Russo (1985a) employed interviews and questionnaires to obtain a broad range of strategies and the think-aloud procedure along with interviews and questionnaires to examine strategies used for a specific task. Data source triangulation is often used in longitudinal studies of learning strategies. That is, researchers collect the data from the same participants over an extended period of time (e.g., Mangubhai, 1991; O'Malley & Chamot, 1990).

More than one mode of triangulation is also employed in learning strategy studies. For example, Naiman, Frohlich, Stern, and Todesco (1978) adopted data type and methodological triangulation. They used performance tests, observation, and interviews to identify learning strategies which effective language learners use. To find out the relationships between learning strategies and language proficiency, Mangubhai (1991) used data source and methodological triangulation. The data was collected over twenty teaching sessions through concurrent think-aloud protocols, as well as immediate and delayed retrospective verbal reports.

Most of the studies on strategy instruction do not use several modes of triangulation. For example, Carrell, Pharis, and Liberto (1989) evaluated the metacognitive strategy training for ESL reading using only data type triangulation. They examined the training effect using gain scores on the open-ended questions, cloze semantic maps, and open-ended semantic maps. Similarly, Brown and Perry (1991) used only data type triangulation with recognition and cued-recall instruments in order to evaluate vocabulary acquisition. O'Malley, Chamot, Stewner-Manzanares, Küpper, and Russo (1985b) implemented strategy instruction to assess the learning of ESL learners in the areas of listening, speaking, and vocabulary. They assessed the strategy training based on only the statistical analyses on speaking, listening, and vocabulary tests. That is, they used only data type triangulation. Although they mentioned the development of the students' strategy use which they noticed through observations, student worksheets, and student interaction, they did not consider it to be a factor to evaluate strategy training.

As we have seen, triangulation is a key procedure to increase internal validity of the emerging findings, and different modes of triangulation are used in ethnography. Nevertheless, in the studies of learning strategy instruction, only data type triangulation which involves different proficiency tests tends to be used to evaluate strategy instruction. This is ascribed to the researchers' presumption that the primary objective of strategy instruction is the progress of language proficiency. This presumption is contrary to the fundamental assumption that strategy training has dual objectives: One is to develop domain-specific knowledge and the other is to foster learning strategies. Furthermore, besides the development of language proficiency and learning strategies, strategy training has another purpose. Its ultimate purpose is to help learners become self-directed rather than to provide students with techniques of learning strategies and to improve their language ability (Chamot, Barnhardt, El-Dinary, & Robbins, 1999; Grenfell & Harris, 1999; Kissam & Holda, 1997; Macaro, 2001; Oxford, 1990; Rubin, 1987; Wenden, 1987). The reason for this is that adult learners need to continue learning on their own after they complete language education at school (Benson, 2001; Knowles, 1980). The length of language education is often limited at school and adult learners possess diversified needs which the school curriculum cannot satisfy completely.

If the ultimate purpose of strategy training is to develop learner autonomy, it should be evaluated based on not only the progress of language proficiency but also on other criteria which assess the extent to which strategy training contributed to learner autonomy. In order for students to continue learning on their own, the development of their strategy use should be examined, the durability of the strategies should be evaluated, and for their diversified needs, the transfer of the strategies should be examined as well. Furthermore, to make sure that students will not lose motivation in strategy training and will acquire learning strategies, their attitudes toward the strategy training should be frequently examined while they are receiving it. Therefore, the criteria to evaluate the strategy training include students' attitudes toward the strategy training, the improvement of students' language proficiency, the development of students' strategy use, the durability of the strategies, and the transfer of the strategies (Cohen, 1998; Oxford, 1990; Wenden, 1987). To evaluate the strategy training based on these multiple criteria agrees with the ultimate purpose of strategy training, the development of self-directed learners. It also prevents researchers from recommending a particular instruction based on a single criterion, which ignores the whole educational outcome of learning (McGroarty & Zhu, 1997).

When strategy training is assessed based not only on the development of language proficiency but also on other criteria including the attitudes toward the strategy training, the

improvement of strategy use, the durability of the strategies, and the transfer of the strategies, different modes of triangulation are necessarily involved. In this study, listening strategy instruction is evaluated according to five criteria mentioned above. This implies measurement triangulation. As research methods, a post-test, questionnaires, guided journals, and self-evaluation sheets were used. Multiple data collection strategies are applied for methodological triangulation. The post-test as quantitative data and questionnaires, guided journals, and self-evaluation sheets as qualitative data are employed for data type triangulation. The students were required to write guided journals and self-evaluation sheets every week over eight months during and after the strategy training. It suggests data source triangulation. Consequently, this study involves measurements, data sources, data types, and methods for triangulation. It uses four different modes of triangulation to describe the effects of the strategy training precisely.

3. METHODOLOGY

3.1 Participants and Setting

Forty-five students in two classes who were in their first year at a female junior college in Aichi Prefecture, Japan, participated in this study. They were all Japanese native speakers, and none of them had stayed in English-speaking countries for more than two months. They were English majors and their English proficiency level was beginning to low-intermediate. There were 25 students in Class A and 20 students in Class B. Class A was the treatment group and Class B was the control group. The treatment group received listening strategy training, but the control group did not.

3.2 Curriculum of Strategy Training Class

3.2.1 Nature of strategy training

The students in the treatment group received strategy training in their normal listening class, which was designed to improve their listening skills. This class was offered once a week and it lasted 90 minutes. Japanese university classes usually begin in April and end in February or March. Strategy training which was integrated into the normal listening comprehension class began on April 23 and ended on October 8. There was a long break in the middle of strategy training because of a one-month study tour and a two-month summer vacation. In total, the students had 12 lessons of strategy training out of 20 normal listening lessons for one semester. On the other hand, the control group had 20 normal listening comprehension classes for one semester. The same materials, which were adapted from published textbooks such as *Listen for it* (Richards, Gordon, & Harper, 1987) and *Listen to me!*

(Foley, 1985), were used for both the treatment and control group classes. Listening comprehension activities were the same, too, except that the treatment group received the strategy training in which the students were taught the name and definition of each strategy and had guidance about how to use it in the activities.

3.2.2 Preparation stage of strategy training

Sequences of strategy training were designed based on previously published strategy training models (e.g., Ellis & Sinclair, 1989; Graham, 1997; Oxford, 1990). These models follow similar steps in strategy training, which were divided into three stages: *preparation stage, lesson stage, and evaluation stage.* Since it is impossible to discuss all three stages in this limited space, only the preparation stage is examined here.

Before the listening strategy training started, the strategies to be taught were chosen. Since the students' current repertoire of listening strategies was determined in the previous study, only those strategies which the students did not often use and thus would be effective for the development of their listening comprehension were selected (see Table 1). These strategies included all three categories of strategies, namely, metacognitive, cognitive, and social/affective strategies according to O'Malley and Chamot's classification of learning strategies (1990). Metacognitive strategies were especially important for the students as it would be desirable for them to be autonomous so that they could continue learning English on their own after graduation from school. The selected metacognitive strategies used were *directed attention, selective attention,* and *self-evaluation* strategies. The selected cognitive strategies used were effective *note taking, summarization,* and *inferencing.* The selected social/affective strategies used were *questioning for clarification in English* and *cooperation.*

3.3 Data Collection Strategies

Multiple data collection strategies for methodological triangulation were used in order to examine various aspects of strategy training. Questionnaires, guided journals, self-evaluation sheets, and a post-test were used as research methods. In order to evaluate the development of listening skills, a post-test was administered. Questionnaires, journals, and self-evaluation sheets were used to investigate the development of listening skills and strategy use. Journals in particular were used to examine the students' attitudes toward strategy training, the durability of the strategies, and the transfer of the strategies across the curriculum.

3.3.1 Questionnaires

Questionnaires were distributed to the students in the *Basic Listening* class after the students completed the strategy training. The questions in the questionnaire were exactly the same as those used in the previous study (see Appendix A).

Table 1

Metacognitive, Cognitive, and Social/Affective Strategies for Listening Skills in Strategy Training

Categories	Listening Strategies
Metacognitive	Directed Attention
	Selective Attention
	Self-Evaluation
Cognitive	Note Taking
	Inferencing
	Summarization
Social/Affective	Questioning for Clarification in English
	Cooperation

3.3.2 Guided journals

The students in the treatment group were asked to write a structured journal at home once a week as a writing assignment (see Appendix B). Journal writing was assigned to the students for two periods of time. The first period was from the first week when the strategy training started to the last week when it was completed. To be more precise, the students started writing the journal for the first period on April 23 and stopped writing it on June 18. There was a one-month study tour and a two-month summer vacation. They resumed writing on September 24 and finished writing on October 8. The second period of journal writing was from the first week after the strategy training was over to the last week when the one-year semester class was finished. In other words, the journal for the second period began on October 22 and finished on December 17.

Japanese was used for journal writing because the students in this study, who were beginning to low-intermediate level, could not express accurate enough what they intended to say in English and might not report their strategy use in detail. The questions in the journal of the first period were used to assess the following aspects of strategy training:

1. Attitudes toward strategy training. To examine students' attitudes toward strategy training, the students were asked about how they felt about the strategy training.

2. Use and transfer of the strategies. To examine the use and transfer of the strategies, the students were asked if they used the strategies they had learned in strategy training in different language tasks.

Journal writing of the second period was used to observe whether or not the students still used the strategies they had practiced in strategy training after strategy training was over as well as the transfer of the strategies to different language tasks.

3.3.3 Self-evaluation sheet

The students filled in the self-evaluation sheet every week during and after the strategy training. The period during which the students filled in the self-evaluation sheet was from April 23 to December 17 with a three-month break because of a study tour and summer vacation. The self-evaluation sheets used in the first and second periods were slightly different from each other (see Appendix C). In the self-evaluation sheet of the second period, Question 4 of the first period, which asked the students about the names of the strategies they had learned in class, was removed.

The foremost purpose of the self-evaluation sheets was to promote the self-evaluation strategy of the students. However, the strategy use of the students could also be examined through this sheet because the sheet contained the question that asked the students which strategies they had used in class.

3.3.4 Post-test

In the previous study (Ozeki, 2000), the students had already taken the pre-test on April 18. In order to compare the development of the listening ability of the students in the control group and those in the treatment group after they had received strategy training, a post-test was administered on October 15. Both the treatment group and the control group participated in the post-test.

As a post-test, the students took a listening comprehension test, *Basic Form B* of The Japan Association of College English Teachers. The format of Basic Form B was the same as that of *Basic Form A*, which had been used in the previous study. It consists of four parts, each of which includes 10 questions. In *Part 1*, students listen to four descriptions and choose one description which best fits the given picture. In *Part 2*, they listen to a question and then to four possible answers. They choose one answer which is the most appropriate. In *Part 3*, they listen to a short conversation and then to the questions concerning the conversation. They listen to four possible answers and choose the most appropriate one. In *Part 4*, they listen to short stories. Then they listen to one or two questions concerning each story and to four possible answers to each question. They are asked to choose one answer, which is the most appropriate. There are six short stories in this part; Two of them propose one question and four of them propose two questions.

Basic Form B and Basic Form A were considered to be parallel forms. Therefore, the development of the listening comprehension ability of the students was judged by comparing the scores of Basic Form A and Basic Form B.

3.4 Data Analysis Strategies

3.4.1 Questionnaires

In each question, the students' answers were open-ended. The answers students wrote down for each listening task were examined several times by the researcher, and certain regularities in the students' answers emerged. In addition to the strategies identified in the previous study, the strategies the students had learned in the strategy training were found. These strategies were *summarization* in the cognitive strategy and cooperation in the social/affective strategy. The codes of these two strategies were created and added to the previous code list. Metacognitive strategies were the same as those in the previous study. The new code list is shown in Table 2 (see Table 2).

Table 2

New Code List in This Study

Main Categories	Subcategories	Codes
Metacognitive	Directed Attention	M D
	Selective Attention	M S
	Self-Evaluation	M E
	Planning	M P
Cognitive	Resourcing of the English/Japanese Dictionary	C R
	Repeated Listening	C L
	Grouping	C G
	Note Taking	C N
	Elaboration	C E
	Translation	C T
	Inferencing	C I
	Repetition	C P
	Rote Memorization	C M
	Summarization	C S
Social/Affective	Questioning for Clarification in Japanese	S J
	Questioning for Clarification in English	S E
	Peeking	S P
	Cooperation	S C

Based on the code list, all the students' answers were coded by the researcher and another rater. The codings of the researcher and the rater were compared, and the strategies which were coded as the same and as different by both persons were counted. The interrater reliability of the data coding was 90%. The researcher and the rater discussed the strategies which they coded differently and came to a consensus. Then the occurrences of the learning strategies were tallied for all the students.

3.4.2 Guided journals

Journals were divided into those written in the first period and those in the second period. There were 12 entries in the first period and seven entries in the second period.

There were three questions in the journals for the first period. All the open-ended answers to *Questions 1* and *2* were classified by the date marked on the journal and by each question. For instance, the answers of all the students to *Question 1* on April 23 could be seen at once.

Although Questions 1 and 2 of the guided journal for the first period were different questions, in Question 1, the students very often gave the answers which also applied to Question 2. For instance, some students answered, "Summarization was very difficult for me because it was the first time to practice it. But I think it is very useful for me to learn it because I can use it in all the other subjects." Consequently, the answers to Questions 1 and 2 were analyzed together. All the opinions listed per date were tallied according to the kind of opinions.

The answers to *Question 3* were analyzed as follows: First, whether or not the students used strategies in other classes was tallied for each date. Second, if they did, the number of strategies they had used was counted for each strategy they mentioned. Third, the names of the classes where they had used strategies were listed.

The guided journal for the second period asked the students to answer only one question. This question was exactly the same as Question 3 of the guided journal for the first period. Therefore, the answers to this question were analyzed in the same way as the answers to Question 3 of the first period.

3.4.3 Self-evaluation sheet

There were 19 entries in each student's self-evaluation sheet (see Appendix C). There were eight questions on this sheet. The answers of all the students were classified by date and question. For example, the answers of all the students to *Question 3* on April 23 could be seen at once. *Questions 1, 2,* and *8* were multiple-choice questions, and the answers to these questions were tallied. All the open-ended answers to *Questions 3, 5, 6,* and *7* were transcribed and tallied according to the kind of answers. The strategies the students had mentioned in *Question 4* were coded. Coding was carried out according to the new code list (see Table 2) because no new strategies were found in the self-evaluation sheet.

3.4.4 Post-test

The scores of all the students who took the *Basic Form B* test were calculated by *Kaitakusha*, a publisher of EFL books in Japan, which had published this listening comprehension test. The final score of each student was quantified through the following procedure, which was provided by the publisher. First, the raw score in each part, namely, *Parts 1, 2, 3,* and *4,* of each student was counted. Next the raw score of each part was converted to standardized scores. Standardized scores of Parts 1 and 2 were the scores which received twice the weight, while those of Parts 3 and 4 were the scores which received three times the weight.

4. SUMMARY OF THE RESULTS

In this study, effectiveness of strategy training is evaluated according to five criteria: the development of students' listening ability, the improvement of their strategy use, their attitudes toward strategy training, the transfer of the strategies, and the durability of the strategies.

From the result of the comparison of the pre-test and post-test scores by t-test, the strategy training was successful according to the first criterion, the development of the students' listening ability, because the progress of the listening ability of the students in the treatment group was greater than that of the control group. Next, the guided journals for the treatment group revealed that the students had positive attitudes toward the strategy training as a whole as well as the training for each strategy. The results of the self-evaluation sheet and the journal showed that the students used the strategies they had learned not only in the listening comprehension class but also in other classes. In addition to that, they continued applying the strategies in their classes after the strategy training was completed.

The development of the students' strategy use could be seen from the results of the questionnaires, self-evaluation sheets, and journals. The treatment group used less cognitive and social/affective strategies than did the control group. However, the kinds of strategies which the control group used were almost the same as those which had been found to be used by the students in the previous study: translation, resourcing, inferencing, and note taking for cognitive strategies and questioning for clarification in Japanese and peeking for social/affective strategies. These strategies required little conceptual processing of the students. For example, although inferencing usually involves intricate, reflective processes, the nature of inferencing as used by the students of the control group was modest, guessing something from visible or audible clues such as the speaker's gestures, facial expressions, and

intonation. Similarly, their note taking was unsophisticated, trying to translate into Japanese what the speaker said without processing the information. What was more important was that, except for peeking and inferencing, the other strategies almost always involved the process of translation. It seemed that without translation the students in the control group could not have performed any task.

The quality of the strategies which the students in the treatment group used exceeded that of the control group. They often applied cognitively demanding strategies such as inferencing with linguistic and non-linguistic clues, various forms of note taking, and summarization in the listening class as well as in other classes. They also came to employ elaboration more, which they had not learned explicitly in the strategy training. It seemed that learning the strategies explicitly helped the students activate their thinking processes and become conscious of other listening strategies which would improve their listening ability. It could be said that they learned to use cognitively elaborative strategies through strategy training.

The students in the treatment group used less translation after they had received the strategy training. One of the reasons was that translation was discouraged in class in order to save extra processing time necessary for translation. The other reason was that resourcing, closely related to translation, was also discouraged in order to enhance the use of inferencing and questioning for clarification. The students could refrain from using translation and resourcing, which seemed not to contribute to their learning effectively, by practicing more demanding but effective strategies.

The students in the treatment group used metacognitive strategies more often than those in the control group. Directed attention, selective attention, and planning were often used at the same time they used other cognitive strategies. Self-evaluation, which they were expected to use after class, became familiar to them while they were receiving the strategy training. Besides these metacognitive strategies which they had learned explicitly in the strategy training, they came to use another metacognitive strategy, planning. By using planning, they previewed the concept of a task and proposed strategies for a particular task. Being conscious of available strategies seemed to enable the students to employ planning.

Finally, judging from the results of the questionnaire and self-evaluation sheet, the students who received the strategy training overcame their weaknesses in listening to some extent as they developed their strategy use. These weaknesses included becoming anxious and losing track of the material when they heard unfamiliar words or translating earlier portions of a passage and thus missing subsequent portions.

In sum, the students improved the use of the strategies in the following aspects through the strategy training: (a) The students utilized metacognitive strategies such as directed

attention, selective attention, and self-evaluation more often; (b) applied more cognitively demanding strategies such as inferencing, summarization, and note taking to appropriate tasks; (c) refrained from using less effective strategies such as translation and resourcing; and (d) developed other productive strategies such as planning and elaboration.

To conclude, the strategy training had been successful based on the five criteria mentioned above.

5. DISCUSSION AND CONCLUSION

Previous studies which examined strategy training focused on solely the development of performance of language tasks through strategy training. Nevertheless, the critical role of strategy training in language teaching is to foster learner autonomy. Consequently, it should address other effects of strategy training as well as the development of language proficiency. Measurement, data source, data type, and method triangulation were used in order to assess the listening strategy instruction in this study. The use of multiple modes of triangulation made it possible to not only describe the findings thoroughly but also to give them credibility.

In the assessment of strategy training, the following five criteria were introduced: the development of students' listening ability, the improvement of their strategy use, their attitudes towards strategy training, the transfer of the strategies, and the durability of the strategies. Here, criterion or measurement triangulation was adopted. The development of the students' use of metacognitive, cognitive, and social/affective strategies was seen through the open-ended questionnaires, guided journals, and self-evaluation sheets. This finding was confirmed by the use of these three different data collection strategies, that is, method triangulation. The examination of the guided journals and evaluation sheets showed that the students used the strategies they had learned not only in listening classes but also in other classes. They also revealed that the students continued employing the strategies after the strategy training had been completed. These findings were triangulated by two different methods, the guided journals and evaluation sheets, which implies method triangulation. The guided journals showed that the students favored the listening strategy training. They liked instruction of each strategy training along with the whole strategy training. The students wrote the guided journals and self-evaluation sheets every week each time they had a listening class. In other words, data from the guided journals and self-evaluation sheets were collected at different times. Therefore, data source triangulation was included. Finally, the use of different data types for triangulation was also involved in this study. The comparison of the pre-test and post-test scores showed that the development of listening skills of the treatment

group outperformed that of the control group. The use of quantitative data of listening tests along with qualitative data of questionnaires, journals, and self-evaluation sheets indicates data type triangulation.

In brief, measurement, method, data source, and data type triangulation were used in order to assess the listening strategy training. The use of multiple protocols for triangulation has rarely been introduced in strategy instruction research, although it is probably the only means to assess strategy training precisely. Further research is needed to assess strategy instruction in the fields of reading, writing, speaking, and content areas through the use of different modes of triangulation.

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Appendix A

Questionnaire

Year _____ Name _____

Student Number _____

Answer the following questions in detail.

1. At home, you are working on listening comprehension homework. When you don't understand the words you hear, what do you do?
2. In class, you are working on a listening comprehension exercise. When you don't understand the words you hear, what do you do?
3. Your teacher talks for ten minutes about college life in the U.S. You have to understand the main idea and then answer several questions about her talk.
    a. What do you do that helps you understand the teacher?
    b. What do you do to remember the main idea and details?
    c. What do you do that helps you answer questions?
4. Your teacher tells you the steps needed to do the activity, and then you have to actually do it yourself.
    a. Do you have special techniques to remember the steps?
    b. What do you do if you forget what to do next as you are doing the activity?
5. You are talking to a foreign teacher who only speaks English. You must listen to what he/she says and understand the meaning.
    a. What do you do that helps you understand?
    b. What do you do that helps you remember new words or phrases?
6. Your teacher says several sentences in the presentation that include words you don't know. Do you have special tricks to help you understand her presentation?
7. Do you have other techniques which you use to understand English?
8. Do you check your comprehension? If yes, how?
9. What is your weakness in listening comprehension?

Appendix B

Guided Journals

(for the First Period)

1. What do you think of the strategy training this week?

2. Do you think that strategy training is useful for your language development?

   Yes, I do because

   _____

   No, I don't because

   _____

3. Did you use learned strategies for the other classes?

   Yes, I used (names of strategies) for (names of classes).

   Yes, I used _____ for _____.

   Yes, I used _____ for _____.

   Yes, I used _____ for _____.

   No, I didn't.

(for the Second Period)

Did you use strategies you had learned in your classes this week?

Yes, I used (names of strategies) for (names of classes).

Yes, I used _____ for _____.

Yes, I used _____ for _____.

Yes, I used _____ for _____.

No, I didn't.

Appendix C

Self-Evaluation Sheet

(For the First Period)

1. What percentage of the material of each listening task did you understand today?

Task 1	Less than 50%	About 50%	More than 50%
Task 2	Less than 50%	About 50%	More than 50%
Task 3	Less than 50%	About 50%	More than 50%
Task 4	Less than 50%	About 50%	More than 50%

2. What prevents you from understanding the material?

_____

3. Do you think that you comprehended more of the spoken material than in the last class?

Yes No

4. What kind of learning strategies did you learn this week?

_____

_____

5. Which strategies did you use in this class?

_____

_____

6. What did you learn in this class? (English vocabulary, grammar, organization, and so on)

_____

7. What kind of mistakes did you make in this class?

_____

8. Did you concentrate on listening in class?

Yes, all the time So, so Not really

(For the Second Period)

1. What percentage of the material of each listening task did you understand today?

Task 1	Less than 50%	About 50%	More than 50%
Task 2	Less than 50%	About 50%	More than 50%
Task 3	Less than 50%	About 50%	More than 50%
Task 4	Less than 50%	About 50%	More than 50%

2. What prevents you from understanding the material?

_____

3. Do you think that you comprehended more of the spoken material than in the last class?

Yes No

4. Which strategies did you use in this class?

_____

_____

5. What did you learn in this class? (English vocabulary, grammar, organization, and so on)

_____

6. What kind of mistakes did you make in this class?

_____

7. Did you concentrate on listening in class?

Yes, all the time So, so Not really